



Att'y Docket No. :08805.105001
Amendment and Submission of Sequence Listing
December 20, 2001

Clean Copy of Replacement Paragraphs

RECEIVED
JAN 22 2001
TECH CENTER 1600/2900



dambinova.ST25.txt
SEQUENCE LISTING

<110> CIS Biotech, Inc.
Dambinova, Svetlana

<120> Rapid multiple panel of biomarkers in laboratory blood tests for
TIA/stroke

<130> 08805.105001

<140> US 09/922,011

<141> 2001-08-02

<160> 17

<170> PatentIn version 3.1

<210> 1

<211> 1464

<212> PRT

<213> homo sapiens

<400> 1

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TECH CENTER 1600/2900

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Val Trp Arg Asp Pro Ala Gln Asn Ala Ala Ala Glu Lys Gly Pro Pro
20 25 30

Ala Leu Asn Ile Ala Val Leu Leu Gly His Ser His Asp Val Thr Glu
35 40 45

Arg Glu Leu Arg Asn Leu Trp Gly Pro Glu Gln Ala Thr Gly Leu Pro
50 55 60

Leu Asp Val Asn Val Val Ala Leu Leu Met Asn Arg Thr Asp Pro Lys
65 70 75 80

Ser Leu Ile Thr His Val Cys Asp Leu Met Ser Gly Ala Arg Ile His
85 90 95

Gly Leu Val Phe Gly Asp Asp Thr Asp Gln Glu Ala Val Ala Gln Met
100 105 110

dambinova.ST25.txt

Leu Asp Phe Ile Ser Ser Gln Thr Phe Ile Pro Ile Leu Gly Ile His
115 120 125

Gly Gly Ala Ser Met Ile Met Ala Asp Lys Asp Pro Thr Ser Thr Phe
130 135 140

Phe Gln Phe Gly Ala Ser Ile Gln Gln Gln Ala Thr Val Met Leu Lys
145 150 155 160

Ile Met Gln Asp Tyr Asp Trp His Val Phe Ser Leu Val Thr Thr Ile
165 170 175

Phe Pro Gly Tyr Arg Asp Phe Ile Ser Phe Ile Lys Thr Thr Val Asp
180 185 190

Asn Ser Phe Val Gly Trp Asp Met Gln Asn Val Ile Thr Leu Asp Thr
195 200 205

Ser Phe Glu Asp Ala Lys Thr Gln Val Gln Leu Lys Lys Ile His Ser
210 215 220

Ser Val Ile Leu Leu Tyr Cys Ser Lys Asp Glu Ala Val Leu Ile Leu
225 230 235 240

Ser Glu Ala Arg Ser Leu Gly Leu Thr Gly Tyr Asp Phe Phe Trp Ile
245 250 255

Val Pro Ser Leu Val Ser Gly Asn Thr Glu Leu Ile Pro Lys Glu Phe
260 265 270

Pro Ser Gly Leu Ile Ser Val Ser Tyr Asp Asp Trp Asp Tyr Ser Leu
275 280 285

Glu Ala Arg Val Arg Asp Gly Leu Gly Ile Leu Thr Thr Ala Ala Ser
290 295 300

Ser Met Leu Glu Lys Phe Ser Tyr Ile Pro Glu Ala Lys Ala Ser Cys
305 310 315 320

dambinova.ST25.txt

Tyr Gly Gln Ala Glu Lys Pro Glu Thr Pro Leu His Thr Leu His Gln
325 330 335

Phe Met Val Asn Val Thr Trp Asp Gly Lys Asp Leu Ser Phe Thr Glu
340 345 350

Glu Gly Tyr Gln Val His Pro Arg Leu Val Val Ile Val Leu Asn Lys
355 360 365

Asp Arg Glu Trp Glu Lys Val Gly Lys Trp Glu Asn Gln Thr Leu Ser
370 375 380

Leu Arg His Ala Val Trp Pro Arg Tyr Lys Ser Phe Ser Asp Cys Glu
385 390 395 400

Pro Asp Asp Asn His Leu Ser Ile Val Thr Leu Glu Glu Ala Pro Phe
405 410 415

Val Ile Val Glu Asp Ile Asp Pro Leu Thr Glu Thr Cys Val Arg Asn
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Thr Val Pro Cys Arg Lys Phe Val Lys Ile Asn Asn Ser Thr Asn Glu
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Gly Met Asn Val Lys Lys Cys Cys Lys Gly Phe Cys Ile Asp Ile Leu
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Lys Lys Leu Ser Arg Thr Val Lys Phe Thr Tyr Asp Leu Tyr Leu Val
465 470 475 480

Thr Asn Gly Lys His Gly Lys Lys Val Asn Asn Val Trp Asn Gly Met
485 490 495

Ile Gly Glu Val Val Tyr Gln Arg Ala Val Met Ala Val Gly Ser Leu
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Thr Ile Asn Glu Glu Arg Ser Glu Val Val Asp Phe Ser Val Pro Phe

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515

520

525

Val Glu Thr Gly Ile Ser Val Met Val Ser Arg Ser Asn Gly Thr Val
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Ser Pro Ser Ala Phe Leu Glu Pro Phe Ser Ala Ser Val Trp Val Met
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Met Phe Val Met Leu Leu Ile Val Ser Ala Ile Ala Val Phe Val Phe
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Glu Tyr Phe Ser Pro Val Gly Tyr Asn Arg Asn Leu Ala Lys Gly Lys
 580 585 590

Ala Pro His Gly Pro Ser Phe Thr Ile Gly Lys Ala Ile Trp Leu Leu
 595 600 605

Trp Gly Leu Val Phe Asn Asn Ser Val Pro Val Gln Asn Pro Lys Gly
 610 615 620

Thr Thr Ser Lys Ile Met Val Ser Val Trp Ala Phe Phe Ala Val Ile
 625 630 635 640

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 645 650 655

Glu Phe Val Asp Gln Val Thr Gly Leu Ser Asp Lys Lys Phe Gln Arg
 660 665 670

Pro His Asp Tyr Ser Pro Pro Phe Arg Phe Gly Thr Val Pro Asn Gly
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Ser Thr Glu Arg Asn Ile Arg Asn Asn Tyr Pro Tyr Met His Gln Tyr
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Met Thr Arg Phe Asn Gln Arg Gly Val Glu Asp Ala Leu Val Ser Leu
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dambinova.ST25.txt

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dambinova.ST25.txt

Ser Leu Ile Val Asp Met Val Ser Asp Lys Gly Asn Leu Ile Tyr Ser
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Asp Asn Arg Ser Phe Gln Gly Lys Asp Ser Ile Phe Gly Asp Asn Met
945 950 955 960

Asn Glu Leu Gln Thr Phe Val Ala Asn Arg His Lys Asp Asn Leu Ser
965 970 975

Asn Tyr Val Phe Gln Gly Gln His Pro Leu Thr Leu Asn Glu Ser Asn
980 985 990

Pro Asn Thr Val Glu Val Ala Val Ser Thr Glu Ser Lys Gly Asn Ser
995 1000 1005

Arg Pro Arg Gln Leu Trp Lys Lys Ser Met Glu Ser Leu Arg Gln
1010 1015 1020

Asp Ser Leu Asn Gln Asn Pro Val Ser Gln Arg Asp Glu Lys Thr
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Ala Glu Asn Arg Thr His Ser Leu Lys Ser Pro Arg Tyr Leu Pro
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Glu Glu Val Ala His Ser Asp Ile Ser Glu Thr Ser Ser Arg Ala
1055 1060 1065

Thr Cys His Arg Glu Pro Asp Asn Asn Lys Asn His Lys Thr Lys
1070 1075 1080

Asp Asn Phe Lys Arg Ser Met Ala Ser Lys Tyr Pro Lys Asp Cys
1085 1090 1095

Ser Asp Val Asp Arg Thr Tyr Met Lys Thr Lys Ala Ser Ser Pro
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Arg Asp Lys Ile Tyr Thr Ile Asp Gly Glu Lys Glu Pro Ser Phe
1115 1120 1125

dambinova.ST25.txt

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Arg	Lys	Gly	Asp	Ser	Thr	Leu	Pro	Met	Asn	Arg	Asn	Pro	Leu	His
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Asn	Glu	Asp	Gly	Leu	Pro	Asn	Asn	Asp	Gln	Tyr	Lys	Leu	Tyr	Ala
1175						1180					1185			
Lys	His	Phe	Thr	Leu	Lys	Asp	Lys	Gly	Ser	Pro	His	Ser	Glu	Gly
1190						1195					1200			
Ser	Asp	Arg	Tyr	Arg	Gln	Asn	Ser	Thr	His	Cys	Arg	Ser	Cys	Leu
1205						1210					1215			
Ser	Asn	Leu	Pro	Thr	Tyr	Ser	Gly	His	Phe	Thr	Met	Arg	Ser	Pro
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Phe	Lys	Cys	Asp	Ala	Cys	Leu	Arg	Met	Gly	Asn	Leu	Tyr	Asp	Ile
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Asp	Glu	Asp	Gln	Met	Leu	Gln	Glu	Thr	Gly	Asn	Pro	Ala	Thr	Arg
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Glu	Glu	Val	Tyr	Gln	Gln	Asp	Trp	Ser	Gln	Asn	Asn	Ala	Leu	Gln
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Phe	Gln	Lys	Asn	Lys	Leu	Arg	Ile	Asn	Arg	Gln	His	Ser	Tyr	Asp
1280						1285					1290			
Asn	Ile	Leu	Asp	Lys	Pro	Arg	Glu	Ile	Asp	Leu	Ser	Arg	Pro	Ser
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dambinova.ST25.txt

1310

1315

1320

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Asn Lys Ser Ser Leu Phe Pro Gln Gly Leu Glu Asp Ser Lys Arg
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Ser Lys Ser Leu Leu Pro Asp His Ala Ser Asp Asn Pro Phe Leu
1355 1360 1365

His Thr Tyr Gly Asp Asp Gln Arg Leu Val Ile Gly Arg Cys Pro
1370 1375 1380

Ser Asp Pro Tyr Lys His Ser Leu Pro Ser Gln Ala Val Asn Asp
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Ser Tyr Leu Arg Ser Ser Leu Arg Ser Thr Ala Ser Tyr Cys Ser
1400 1405 1410

Arg Asp Ser Arg Gly His Ser Asp Val Tyr Ile Ser Glu His Val
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Met Pro Tyr Ala Ala Asn Lys Asn Thr Met Tyr Ser Thr Pro Arg
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<213> homo sapiens

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dambinova.ST25.txt

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His Val Cys Asp Leu Met Ser Gly Ala Arg Ile His Gly Leu Val Phe	65	70	75
Gly Asp Asp Thr Asp Gln Glu Ala Val Ala Gln Met Leu Asp Phe Ile	85	90	95
Ser Ser Gln Thr Phe Ile Pro Ile Leu Gly Ile His Gly Gly Ala Ser	100	105	110
Met Ile Met Ala Asp Lys Asp Pro Thr Ser Thr Phe Phe Gln Phe Gly	115	120	125
Ala Ser Ile Gln Gln Gln Ala Thr Val Met Leu Lys Ile Met Gln Asp	130	135	140
Tyr Asp Trp His Val Phe Ser Leu Val Thr Thr Ile Phe Pro Gly Tyr	145	150	155
Arg Asp Phe Ile Ser Phe Ile Lys Thr Thr Val Asp Asn Ser Phe Val	165	170	175
Gly Trp Asp Met Gln Asn Val Ile Thr Leu Asp Thr Ser Phe Glu Asp	180	185	190
Ala Lys Thr Gln Val Gln Leu Lys Lys Ile His Ser Ser Val Ile Leu	195	200	205

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Val	Ser	Gly	Asn	Thr 245	Glu	Leu	Ile	Pro	Lys 250	Glu	Phe	Pro	Ser	Gly 255	Leu
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Lys	Phe 290	Ser	Tyr	Ile	Pro	Glu 295	Ala	Lys	Ala	Ser	Cys 300	Tyr	Gly	Gln	Ala
Glu 305	Lys	Pro	Glu	Thr	Pro 310	Leu	His	Thr	Leu	His 315	Gln	Phe	Met	Val	Asn 320
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Glu	Lys	Val 355	Gly	Lys	Trp	Glu	Asn 360	Gln	Thr	Leu	Ser	Leu 365	Arg	His	Ala
Val	Trp 370	Pro	Arg	Tyr	Lys	Ser 375	Phe	Ser	Asp	Cys	Glu 380	Pro	Asp	Asp	Asn
His 385	Leu	Ser	Ile	Val	Thr 390	Leu	Glu	Glu	Ala	Pro 395	Phe	Val	Ile	Val	Glu 400
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dambinova.ST25.txt

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Lys Lys Cys Cys Lys Gly Phe Cys Ile Asp Ile Leu Lys Lys Leu Ser
435 440 445

Arg Thr Val Lys Phe Thr Tyr Asp Leu Tyr Leu Val Thr Asn Gly Lys
450 455 460

His Gly Lys Lys Val Asn Asn Val Trp Asn Gly Met Ile Gly Glu Val
465 470 475 480

Val Tyr Gln Arg Ala Val Met Ala Val Gly Ser Leu Thr Ile Asn Glu
485 490 495

Glu Arg Ser Glu Val Val Asp Phe Ser Val Pro Phe Val Glu Thr Gly
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dambinova.ST25.txt

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dambinova.ST25.txt

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dambinova.ST25.txt

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dambinova.ST25.txt

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tatattccaa attccattaa ggtcagccca ccatgtaatt ttctcatcag aatgcctaa 51
00

tggtttctct aatacagaat aagcaatatg gtgtgcatgt aaacctgaca cagacaaaat 51
60

aaaaacagtt aagaatgcat ctgcactgta gtcggatttg aacatgtgca agagattagg 52
20

aagtttggct cgtaacagtt tcagctttct tgttatgcct tccatcacag ccagggctca 52
80

ccccagaac tccaggctcc cctaaagaat agcaaatacag tgtgttcgtg atgactgtgc 53
40

taccttcatt atagttcatt tccaagacac atctggagcc aaaggcccga gggaccctca 54
00

ggtggggaga gctacaggaa tctcttttga tgttgatgtg tgtttctctc taccctcggc 54
60

ttcgatggtc ttgttcagag ctgcataaac taacacattt atgtctccga gatctaagtg 55
20

tggatcttct gtctgtgaca cagtggccat tgtagtttat ccgaagacg cctatgtacg 55
80

taagtttgca tttcctccct tctggtgatg actcagggtt gtatagtatc tgttaccctt 56
40

tccctcccag agtaaccata actcgttccg tttccaaaca gccatggtgg tgtccaatta 57
00

dambinova.ST25.txt

gctgtgtatc gctcttccca gagttgttaa tgtggtgaca tgcaccaaca gccgtatgtg 57
60

tactgtgatc tgtaagaagt acaatgccat ctgtctgccg aaggctagca tggtttttagg 58
20

tttatcttcc ttcacatcca gaaattctgt tggacactca cttccacccc aaactcctca 58
80

aatcaaaagc cttcaaaaca cgaggcactc ttggatctac cctgagtatc ctccaaactg 59
40

tggatacagt ttagtgagac aagcaatttc tcccttctga gttattctct ctgttggtgg 60
00

caaaccactt catagcacca acagagatgt aggaaaaatt cctcaaagta tttgtcattt 60
60

ctgagtcgcc tgcattatcc cattcttatt ctctcaaac ctgtgcatat atgacatgaa 61
20

atgatatcca tttttttttt aagttagaaa cagagagggg aatacttatg catggggagc 61
80

ctgttagcac agtgccctgcc acaaaaacaa gtgccccga caagatagtt gctatgttat 62
40

gacactttct cagatcagga ttttctagtt taaaaattaa atatcataaa acg 62
93

<210> 6
<211> 1608
<212> DNA
<213> homo sapiens

<400> 6
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60

ggtcacagcc acgacgtgac agagcgcgaa cttcgaacac tgtggggccc cgagcaggcg 1
20

gcgggggctgc ccctggacgt gaacgtggta gctctgctga tgaaccgcac cgaccccaag 1
80

agcctcatca cgcacgtgtg cgacctcatg tccggggcac gcatccacgg cctcgtgttt 2
40

ggggacgaca cggaccagga ggccgtagcc cagatgctgg attttatctc ctcccacacc 3
00

dambinova.ST25.txt

ttcgtcccca tcttgggcat tcatgggggc gcatctatga tcatgggtga caaggatccg 60	3
acgtctacct tcttccagtt tggagcgtcc atccagcagc aagccacggt catgctgaag 20	4
atcatgcagg attatgactg gcatgtcttc tccctgggtga ccactatctt ccctgggtac 80	4
aggaattca tcagcttcgt caagaccaca gtggacaaca gctttgtggg ctgggacatg 40	5
cagaatgtga tcacactgga cacttccttt gaggatgcaa agacacaagt ccagctgaag 00	6
aagatccact cttctgtcat cttgctctac tgttccaaag acgaggctgt tctcattctg 60	6
agtgaggccc gtcaccttgg cctcaccggg tatgatttct tctggattgt cccagcttg 20	7
gtctctggga acacggagct catcccaaaa gagtttccat cgggactcat ttctgtctcc 80	7
tacgatgact gggactacag cctggaggcg agagtgaggg acggcattgg catcctaacc 40	8
accgctgcat cttctatgct ggagaagttc tcctacatcc ccgaggccaa ggccagctgc 00	9
tacgggcaga tggagaggcc agaggtcccg atgcacacct tgcacccatt tatgggtcaat 60	9
gttacatggg atggcaaaga cttatccttc actgaggaag gctaccagggt gcaccccagg 20	10
ctggtggtga ttgtgctgaa caaagaccgg gaatgggaaa aggtgggcaa gtgggagAAC 80	10
catacgctga gcctgaggca cgccgtgtgg cccaggtaca agtccttctc cgactgtgag 40	11
ccggatgaca accatctcag catcgtcacc ctggaggagg cccattctgt catcgtggaa 00	12
gacatagacc ccctgaccga gacgtgtgtg aggaacaccg tgccatgtcg gaagtctgtc 60	12
aaaatcaaca attcaaccaa tgaggggatg aatgtgaaga aatgctgcaa ggggttctgc 20	13

dambinova.ST25.txt

attgatattc tgaagaagct ttccagaact gtgaagttta cttacgacct ctatctggtg 13
80

accaatggga agcatggcaa gaaagttaac aatgtgtgga atggaatgat cggatgaagtg 14
40

gtctatcaac gggcagtcac ggcagttggc tcgctcacca tcaatgagga acgttctgaa 15
00

gtggtggact tctctgtgcc ctttgtggaa acgggaatca gtgtcatggt ttcaagaagt 15
60

aatggcaccg tctcaccttc tgcttttcta gaaccattca ggcctctt 16
08

<210> 7
<211> 62
<212> DNA
<213> homo sapiens

<400> 7
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60

tc
62

<210> 8
<211> 21
<212> DNA
<213> artificial sequence

<220>
<223> oligonucleotide primer

<400> 8
agcatggcaa gaaagttaac a
21

<210> 9
<211> 21
<212> DNA
<213> artificial sequence

<220>
<223> oligonucleotide primer

dambinova.ST25.txt

<400> 9
acgttctgaa gtggtggact t
21

<210> 10
<211> 1480
<212> PRT
<213> homo sapiens

<400> 10

Met	Lys	Pro	Arg	Ala	Glu	Cys	Cys	Ser	Pro	Lys	Phe	Trp	Leu	Val	Leu
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Ala	Val	Leu	Ala	Val	Ser	Gly	Ser	Arg	Ala	Arg	Ser	Gln	Lys	Ser	Pro
			20					25					30		

Pro	Ser	Ile	Gly	Ile	Ala	Val	Ile	Leu	Val	Gly	Thr	Ser	Asp	Glu	Val
		35					40					45			

Ala	Ile	Lys	Asp	Ala	His	Glu	Lys	Asp	Asp	Phe	His	His	Leu	Ser	Val
	50					55					60				

Val	Pro	Arg	Val	Glu	Leu	Val	Ala	Met	Asn	Glu	Thr	Asp	Pro	Lys	Ser
65					70					75					80

Ile	Ile	Thr	Arg	Ile	Cys	Asp	Leu	Met	Ser	Asp	Arg	Lys	Ile	Gln	Gly
				85					90					95	

Val	Val	Phe	Ala	Asp	Asp	Thr	Asp	Gln	Glu	Ala	Ile	Ala	Gln	Ile	Leu
			100					105					110		

Asp	Phe	Ile	Ser	Ala	Gln	Thr	Leu	Thr	Pro	Ile	Leu	Gly	Ile	His	Gly
		115					120					125			

Gly	Ser	Ser	Met	Ile	Met	Ala	Asp	Lys	Asp	Glu	Ser	Ser	Met	Phe	Phe
	130					135					140				

Gln	Phe	Gly	Pro	Ser	Ile	Glu	Gln	Gln	Ala	Ser	Val	Met	Leu	Asn	Ile
145					150					155					160

dambinova.ST25.txt

Met	Glu	Glu	Tyr	Asp	Trp	Tyr	Ile	Phe	Ser	Ile	Val	Thr	Thr	Tyr	Phe
				165					170					175	
Pro	Gly	Tyr	Gln	Asp	Phe	Val	Asn	Lys	Ile	Arg	Ser	Thr	Ile	Glu	Asn
			180					185					190		
Ser	Phe	Val	Gly	Trp	Glu	Leu	Glu	Glu	Val	Leu	Leu	Leu	Asp	Met	Ser
		195					200					205			
Leu	Asp	Asp	Gly	Asp	Ser	Lys	Ile	Gln	Asn	Gln	Leu	Lys	Lys	Leu	Gln
	210					215					220				
Ser	Pro	Ile	Ile	Leu	Leu	Tyr	Cys	Thr	Lys	Glu	Glu	Ala	Thr	Tyr	Ile
225					230					235					240
Phe	Glu	Val	Ala	Asn	Ser	Val	Gly	Leu	Thr	Gly	Tyr	Gly	Tyr	Thr	Trp
				245					250					255	
Ile	Val	Pro	Ser	Leu	Val	Ala	Gly	Asp	Thr	Asp	Thr	Val	Pro	Ala	Glu
			260					265					270		
Phe	Pro	Thr	Gly	Leu	Ile	Ser	Val	Ser	Tyr	Asp	Glu	Trp	Asp	Tyr	Gly
		275					280					285			
Leu	Pro	Ala	Arg	Val	Arg	Asp	Gly	Ile	Ala	Ile	Ile	Thr	Thr	Ala	Ala
	290					295					300				
Ser	Asp	Met	Leu	Ser	Glu	His	Ser	Phe	Ile	Pro	Glu	Pro	Lys	Ser	Ser
305					310					315					320
Cys	Tyr	Asn	Thr	His	Glu	Lys	Arg	Ile	Tyr	Gln	Ser	Asn	Met	Leu	Asn
				325					330					335	
Arg	Tyr	Leu	Ile	Asn	Val	Thr	Phe	Glu	Gly	Arg	Asn	Leu	Ser	Phe	Ser
			340					345					350		
Glu	Asp	Gly	Tyr	Gln	Met	His	Pro	Lys	Leu	Val	Ile	Ile	Leu	Leu	Asn
		355					360					365			

dambinova.ST25.txt

Lys Glu Arg Lys Trp Glu Arg Val Gly Lys Trp Lys Asp Lys Ser Leu
370 375 380

Gln Met Lys Tyr Tyr Val Trp Pro Arg Met Cys Pro Glu Thr Glu Glu
385 390 395 400

Gln Glu Asp Asp His Leu Ser Ile Val Thr Leu Glu Glu Ala Pro Phe
405 410 415

Val Ile Val Glu Ser Val Asp Pro Leu Ser Gly Thr Cys Met Arg Asn
420 425 430

Thr Val Pro Cys Gln Lys Arg Ile Val Thr Glu Asn Lys Thr Asp Glu
435 440 445

Glu Pro Gly Tyr Ile Lys Lys Cys Cys Lys Gly Phe Cys Ile Asp Ile
450 455 460

Leu Lys Lys Ile Ser Lys Ser Val Lys Phe Thr Tyr Asp Leu Tyr Leu
465 470 475 480

Val Thr Asn Gly Lys His Gly Lys Lys Ile Asn Gly Thr Trp Asn Gly
485 490 495

Met Ile Gly Glu Val Val Met Lys Arg Ala Tyr Met Ala Val Gly Ser
500 505 510

Leu Thr Ile Asn Glu Glu Arg Ser Glu Val Val Asp Phe Ser Val Pro
515 520 525

Phe Ile Glu Thr Gly Ile Ser Val Met Val Ser Arg Ser Asn Gly Thr
530 535 540

Val Ser Pro Ser Ala Phe Leu Glu Pro Phe Ser Ala Asp Val Trp Val
545 550 555 560

Met Met Phe Val Met Leu Leu Ile Val Ser Ala Val Ala Val Phe Val

dambinova.ST25.txt

565

570

575

Phe Glu Tyr Phe Ser Pro Val Gly Tyr Asn Arg Cys Leu Ala Asp Gly
580 585 590

Arg Glu Pro Gly Gly Pro Ser Phe Thr Ile Gly Lys Ala Ile Trp Leu
595 600 605

Leu Trp Gly Leu Val Phe Asn Asn Ser Val Pro Val Gln Asn Pro Lys
610 615 620

Gly Thr Thr Ser Lys Ile Met Val Ser Val Trp Ala Phe Phe Ala Val
625 630 635 640

Ile Phe Leu Ala Ser Tyr Thr Ala Asn Leu Ala Ala Phe Met Ile Gln
645 650 655

Glu Glu Tyr Val Asp Gln Val Ser Gly Leu Ser Asp Lys Lys Phe Gln
660 665 670

Arg Pro Asn Asp Phe Ser Pro Pro Phe Arg Phe Gly Thr Val Pro Asn
675 680 685

Gly Ser Thr Glu Arg Asn Ile Arg Asn Asn Tyr Ala Glu Met His Ala
690 695 700

Tyr Met Gly Lys Phe Asn Gln Arg Gly Val Asp Asp Ala Leu Leu Ser
705 710 715 720

Leu Lys Thr Gly Lys Leu Asp Ala Phe Ile Tyr Asp Ala Ala Val Leu
725 730 735

Asn Tyr Met Ala Gly Arg Asp Glu Gly Cys Lys Leu Val Thr Ile Gly
740 745 750

Ser Gly Lys Val Phe Ala Ser Thr Gly Tyr Gly Ile Ala Ile Gln Lys
755 760 765

dambinova.ST25.txt

Asp	Ser	Gly	Trp	Lys	Arg	Gln	Val	Asp	Leu	Ala	Ile	Leu	Gln	Leu	Phe
770						775					780				
Gly	Asp	Gly	Glu	Met	Glu	Glu	Leu	Glu	Ala	Leu	Trp	Leu	Thr	Gly	Ile
785					790					795					800
Cys	His	Asn	Glu	Lys	Asn	Glu	Val	Met	Ser	Ser	Gln	Leu	Asp	Ile	Asp
				805					810					815	
Asn	Met	Ala	Gly	Val	Phe	Tyr	Met	Leu	Gly	Ala	Ala	Met	Ala	Leu	Ser
			820					825					830		
Leu	Ile	Thr	Phe	Ile	Cys	Glu	His	Leu	Phe	Tyr	Trp	Gln	Phe	Arg	His
		835					840					845			
Cys	Phe	Met	Gly	Val	Cys	Ser	Gly	Lys	Pro	Gly	Met	Val	Phe	Ser	Ile
	850					855					860				
Ser	Arg	Gly	Ile	Tyr	Ser	Cys	Ile	His	Gly	Val	Ala	Ile	Glu	Glu	Arg
865					870					875					880
Gln	Ser	Val	Met	Asn	Ser	Pro	Thr	Ala	Thr	Met	Asn	Asn	Thr	His	Ser
				885					890					895	
Asn	Ile	Leu	Arg	Leu	Leu	Arg	Thr	Ala	Lys	Asn	Met	Ala	Asn	Leu	Ser
			900					905					910		
Gly	Val	Asn	Gly	Ser	Pro	Gln	Ser	Ala	Leu	Asp	Phe	Ile	Arg	Arg	Glu
		915					920					925			
Ser	Ser	Val	Tyr	Asp	Ile	Ser	Glu	His	Arg	Arg	Ser	Phe	Thr	His	Ser
	930					935					940				
Asp	Cys	Lys	Ser	Tyr	Asn	Asn	Pro	Pro	Cys	Glu	Glu	Asn	Leu	Phe	Ser
945					950					955					960
Asp	Tyr	Ile	Ser	Glu	Val	Glu	Arg	Thr	Phe	Gly	Asn	Leu	Gln	Leu	Lys
				965					970					975	

dambinova.ST25.txt

Asp Ser Asn Val Tyr Gln Asp His Tyr His His His His Arg Pro His
 980 985 990

Ser Ile Gly Ser Ala Ser Ser Ile Asp Gly Leu Tyr Asp Cys Asp Asn
 995 1000 1005

Pro Pro Phe Thr Thr Gln Ser Arg Ser Ile Ser Lys Lys Pro Leu
 1010 1015 1020

Asp Ile Gly Leu Pro Ser Ser Lys His Ser Gln Leu Ser Asp Leu
 1025 1030 1035

Tyr Gly Lys Phe Ser Phe Lys Ser Asp Arg Tyr Ser Gly His Asp
 1040 1045 1050

Asp Leu Ile Arg Ser Asp Val Ser Asp Ile Ser Thr His Thr Val
 1055 1060 1065

Thr Tyr Gly Asn Ile Glu Gly Asn Ala Ala Lys Arg Arg Lys Gln
 1070 1075 1080

Gln Tyr Lys Asp Ser Leu Lys Lys Arg Pro Ala Ser Ala Lys Ser
 1085 1090 1095

Arg Arg Glu Phe Asp Glu Ile Glu Leu Ala Tyr Arg Arg Arg Pro
 1100 1105 1110

Pro Arg Ser Pro Asp His Lys Arg Tyr Phe Arg Asp Lys Glu Gly
 1115 1120 1125

Leu Arg Asp Phe Tyr Leu Asp Gln Phe Arg Thr Lys Glu Asn Ser
 1130 1135 1140

Pro His Trp Glu His Val Asp Leu Thr Asp Ile Tyr Lys Glu Arg
 1145 1150 1155

Ser Asp Asp Phe Lys Arg Asp Ser Val Ser Gly Gly Gly Pro Cys
 1160 1165 1170

dambinova.ST25.txt

Thr	Asn	Arg	Ser	His	Ile	Lys	His	Gly	Thr	Gly	Asp	Lys	His	Gly
	1175					1180					1185			
Val	Val	Ser	Gly	Val	Pro	Ala	Pro	Trp	Glu	Lys	Asn	Leu	Thr	Asn
	1190					1195					1200			
Val	Glu	Trp	Glu	Asp	Arg	Ser	Gly	Gly	Asn	Phe	Cys	Arg	Ser	Cys
	1205					1210					1215			
Pro	Ser	Lys	Leu	His	Asn	Tyr	Ser	Thr	Thr	Val	Thr	Gly	Gln	Asn
	1220					1225					1230			
Ser	Gly	Arg	Gln	Ala	Cys	Ile	Arg	Cys	Glu	Ala	Cys	Lys	Lys	Ala
	1235					1240					1245			
Gly	Asn	Leu	Tyr	Asp	Ile	Ser	Glu	Asp	Asn	Ser	Leu	Gln	Glu	Leu
	1250					1255					1260			
Asp	Gln	Pro	Ala	Ala	Pro	Val	Ala	Val	Thr	Ser	Asn	Ala	Ser	Thr
	1265					1270					1275			
Thr	Lys	Tyr	Pro	Gln	Ser	Pro	Thr	Asn	Ser	Lys	Ala	Gln	Lys	Lys
	1280					1285					1290			
Asn	Arg	Asn	Lys	Leu	Arg	Arg	Gln	His	Ser	Tyr	Asp	Thr	Phe	Val
	1295					1300					1305			
Asp	Leu	Gln	Lys	Glu	Glu	Ala	Ala	Leu	Ala	Pro	Arg	Ser	Val	Ser
	1310					1315					1320			
Leu	Lys	Asp	Lys	Gly	Arg	Phe	Met	Asp	Gly	Ser	Pro	Tyr	Ala	His
	1325					1330					1335			
Met	Phe	Glu	Met	Ser	Ala	Gly	Glu	Ser	Thr	Phe	Ala	Asn	Asn	Lys
	1340					1345					1350			
Ser	Ser	Val	Pro	Thr	Ala	Gly	His	His	His	His	Asn	Asn	Pro	Gly

dambinova.ST25.txt

1355

1360

1365

Gly Gly Tyr Met Leu Ser Lys Ser Leu Tyr Pro Asp Arg Val Thr
1370 1375 1380

Gln Asn Pro Phe Ile Pro Thr Phe Gly Asp Asp Gln Cys Leu Leu
1385 1390 1395

His Gly Ser Lys Ser Tyr Phe Phe Arg Gln Pro Thr Val Ala Gly
1400 1405 1410

Ala Ser Lys Ala Arg Pro Asp Phe Arg Ala Leu Val Thr Asn Lys
1415 1420 1425

Pro Val Val Ser Ala Leu His Gly Ala Val Pro Ala Arg Phe Gln
1430 1435 1440

Lys Asp Ile Cys Ile Gly Asn Gln Ser Asn Pro Cys Val Pro Asn
1445 1450 1455

Asn Lys Asn Pro Arg Ala Phe Asn Gly Ser Ser Asn Gly His Val
1460 1465 1470

Tyr Glu Lys Leu Ser Ser Ile
1475 1480

<210> 11
<211> 531
<212> PRT
<213> homo sapiens

<400> 11

Arg Ser Gln Lys Ser Pro Pro Ser Ile Gly Ile Ala Val Ile Leu Val
1 5 10 15

Gly Thr Ser Asp Glu Val Ala Ile Lys Asp Ala His Glu Lys Asp Asp
20 25 30

Phe His His Leu Ser Val Val Pro Arg Val Glu Leu Val Ala Met Asn

dambinova.ST25.txt

35

40

45

Glu Thr Asp Pro Lys Ser Ile Ile Thr Arg Ile Cys Asp Leu Met Ser
50 55 60

Asp Arg Lys Ile Gln Gly Val Val Phe Ala Asp Asp Thr Asp Gln Glu
65 70 75 80

Ala Ile Ala Gln Ile Leu Asp Phe Ile Ser Ala Gln Thr Leu Thr Pro
85 90 95

Ile Leu Gly Ile His Gly Gly Ser Ser Met Ile Met Ala Asp Lys Asp
100 105 110

Glu Ser Ser Met Phe Phe Gln Phe Gly Pro Ser Ile Glu Gln Gln Ala
115 120 125

Ser Val Met Leu Asn Ile Met Glu Glu Tyr Asp Trp Tyr Ile Phe Ser
130 135 140

Ile Val Thr Thr Tyr Phe Pro Gly Tyr Gln Asp Phe Val Asn Lys Ile
145 150 155 160

Arg Ser Thr Ile Glu Asn Ser Phe Val Gly Trp Glu Leu Glu Glu Val
165 170 175

Leu Leu Leu Asp Met Ser Leu Asp Asp Gly Asp Ser Lys Ile Gln Asn
180 185 190

Gln Leu Lys Lys Leu Gln Ser Pro Ile Ile Leu Leu Tyr Cys Thr Lys
195 200 205

Glu Glu Ala Thr Tyr Ile Phe Glu Val Ala Asn Ser Val Gly Leu Thr
210 215 220

Gly Tyr Gly Tyr Thr Trp Ile Val Pro Ser Leu Val Ala Gly Asp Thr
225 230 235 240

dambinova.ST25.txt

Asp	Thr	Val	Pro	Ala	Glu	Phe	Pro	Thr	Gly	Leu	Ile	Ser	Val	Ser	Tyr	245	250	255
Asp	Glu	Trp	Asp	Tyr	Gly	Leu	Pro	Ala	Arg	Val	Arg	Asp	Gly	Ile	Ala	260	265	270
Ile	Ile	Thr	Thr	Ala	Ala	Ser	Asp	Met	Leu	Ser	Glu	His	Ser	Phe	Ile	275	280	285
Pro	Glu	Pro	Lys	Ser	Ser	Cys	Tyr	Asn	Thr	His	Glu	Lys	Arg	Ile	Tyr	290	295	300
Gln	Ser	Asn	Met	Leu	Asn	Arg	Tyr	Leu	Ile	Asn	Val	Thr	Phe	Glu	Gly	305	310	315
Arg	Asn	Leu	Ser	Phe	Ser	Glu	Asp	Gly	Tyr	Gln	Met	His	Pro	Lys	Leu	325	330	335
Val	Ile	Ile	Leu	Leu	Asn	Lys	Glu	Arg	Lys	Trp	Glu	Arg	Val	Gly	Lys	340	345	350
Trp	Lys	Asp	Lys	Ser	Leu	Gln	Met	Lys	Tyr	Tyr	Val	Trp	Pro	Arg	Met	355	360	365
Cys	Pro	Glu	Thr	Glu	Glu	Gln	Glu	Asp	Asp	His	Leu	Ser	Ile	Val	Thr	370	375	380
Leu	Glu	Glu	Ala	Pro	Phe	Val	Ile	Val	Glu	Ser	Val	Asp	Pro	Leu	Ser	385	390	395
Gly	Thr	Cys	Met	Arg	Asn	Thr	Val	Pro	Cys	Gln	Lys	Arg	Ile	Val	Thr	405	410	415
Glu	Asn	Lys	Thr	Asp	Glu	Glu	Pro	Gly	Tyr	Ile	Lys	Lys	Cys	Cys	Lys	420	425	430
Gly	Phe	Cys	Ile	Asp	Ile	Leu	Lys	Lys	Ile	Ser	Lys	Ser	Val	Lys	Phe	435	440	445

dambinova.ST25.txt

Thr Tyr Asp Leu Tyr Leu Val Thr Asn Gly Lys His Gly Lys Lys Ile
450 455 460

Asn Gly Thr Trp Asn Gly Met Ile Gly Glu Val Val Met Lys Arg Ala
465 470 475 480

Tyr Met Ala Val Gly Ser Leu Thr Ile Asn Glu Glu Arg Ser Glu Val
485 490 495

Val Asp Phe Ser Val Pro Phe Ile Glu Thr Gly Ile Ser Val Met Val
500 505 510

Ser Arg Ser Asn Gly Thr Val Ser Pro Ser Ala Phe Leu Glu Pro Phe
515 520 525

Ser Ala Asp
530

<210> 12
<211> 20
<212> PRT
<213> homo sapiens

<400> 12

Gly Tyr Ile Lys Lys Cys Cys Lys Gly Phe Cys Ile Asp Ile Leu Lys
1 5 10 15

Lys Ile Ser Lys
20

<210> 13
<211> 21
<212> PRT
<213> artificial sequence

<220>
<223> artificial sequence

<400> 13

Cys Gly Tyr Ile Lys Lys Cys Cys Lys Gly Phe Cys Ile Asp Ile Leu

Lys Lys Ile Ser Lys
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<210> 14
<211> 6237
<212> DNA
<213> homo sapiens

<400> 14
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60

aaattatctt ccgttcattt atccttcgtc tttcttatgt ggatatgcaa gcgagaagaa 1
20

gggactggac attcccaaca tgctcactcc cttaatctgt ccgtctagag gtttggcttc 1
80

tacaaaccaa gggagtcgac gagttgaaga tgaagcccag agcggagtgc tgttctccca 2
40

agttctgggtt ggtggtggcc gtcttgccg tgtcaggcag cagagctcgt tctcagaaga 3
00

gccccccag cattggcatt gctgtcatcc tcgtgggcac ttccgacgag gtggccatca 3
60

aggatgcccc cgagaaagat gatttccacc atctctccgt ggtaccccgg gtggaactgg 4
20

tagccatgaa tgagaccgac ccaaagagca tcatcacccg catctgtgat ctcatgtctg 4
80

accggaagat ccaggggggtg gtgtttgctg atgacacaga ccaggaagcc atcgcccaga 5
40

tcctcgattt catttcagca cagactctca ccccgatcct gggcatccac gggggctcct 6
00

ctatgataat ggcagataag gatgaatcct ccatgttctt ccagtttggc ccatcaattg 6
60

aacagcaagc ttccgtaatg ctcaacatca tggaagaata tgactggtag atcttttcta 7
20

tcgtcaccac ctatttcctt ggctaccagg actttgtaaa caagatccgc agcaccattg 7
80

dambinova.ST25.txt

agaatagctt tgtgggctgg gagctagagg aggtcctcct actggacatg tccctggacg 40	8
atggagattc taagatccag aatcagctca agaaacttca aagccccatc attcttcttt 00	9
actgtaccaa ggaagaagcc acctacatct ttgaagtggc caactcagta gggctgactg 60	9
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dambinova.ST25.txt

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dambinova.ST25.txt

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dambinova.ST25.txt

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dambinova.ST25.txt

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dambinova.ST25.txt

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<220>
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<210> 17
<211> 21
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<213> artificial sequence

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<220>
<223> artificial sequence

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dambinova.ST25.txt

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